

REMARKS

This is in response to the Office Action mailed on July 12, 2006, in which claims 21, 23-27, 30, 32 and 36 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kryder et al (U.S. Pat. No. 6,011,664) ("Kryder"), claim 26 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kryder, and claims 22, 28, 29, 31, 33-35 and 37-40 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Allowable Subject Matter

Claims 22, 28, 29, 31, 33-35, and 37-40 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Examiner's indication of allowable subject matter is gratefully acknowledged. Since independent claim 21, 30 and 36 are in condition for allowance (as discussed below), dependent claims 22, 28, 29, 31, 33-35 and 37-40 are allowable therewith.

Dependent claim 29 has been amended to indicate the frequency of the high frequency magnetic field, but the Applicant does not believe that the amendment affects the Examiner's indication of allowable subject matter.

Claim Rejections - 35 U.S.C. § 35 U.S.C. § 102

Claims 21, 23-27, 30, 32 and 36 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kryder.

Independent Claim 21

Independent claim 21 recites a method of writing to a magnetic media. The claim language is reproduced below.

21. A method of writing to a magnetic media, the method comprising:

producing a current in a coil, wherein the current generates a magnetic write field and a high frequency magnetic field; and

wherein the magnetic write field and the high frequency magnetic field create an area of magnetic resonance within the magnetic media.

The italicized claim limitation of independent claim 21 makes clear that the present invention only requires a SINGLE COIL, wherein the current provided to the coil generates BOTH the magnetic write field and the high frequency magnetic field. In contrast, Kryder explicitly teaches the use of TWO SEPARATE COILS to generate the necessary magnetic write field and the high frequency magnetic field (referred to in Kryder as the global static magnetic field and the global high frequency magnetic field, respectively).

In the Office Action mailed July 12, 2006, the Examiner states with respect to independent claim 30 (and applied to independent claim 21 as well) that “Kryder et al discloses a magnetic writer comprising a write pole (44) and a coil (52) adjacent to the write pole having a current that induces a write current component . . . and a high frequency (i.e., RF) component” (Paragraph 2 of the Office Action mailed 7/23/06)

The Applicant respectfully disagrees with this characterization of Kryder. The Office Action seems to imply that coil 52 disclosed in Kryder carries a current that induces BOTH the write current component and the high frequency (RF) component. This statement is in direct contrast with the explicit teaching by Kryder, which states that “A power supply 46 and a loop of wire 48 are used to establish a global static magnetic field, at least in the area of the bit cell 40 to be written” and “[a] radio frequency generator 50 and a loop of wire 52 are used to establish a global radio frequency field.” (Kryder, Col. 5, ll. 39-45, emphasis added). Therefore, the Kryder reference explicitly describes the use of two coils to generate the global static magnetic field and the global radio frequency field. Kryder does not disclose a system or method by which a single coil induces both the magnetic write field and the high frequency magnetic field.

The Office Action also states that “although not explicitly disclosed in the reference, a write current component is considered inherent in the signal emitted by the radio frequency generator since a current component, altered to oscillate at a high frequency is necessary in order to provide the radio frequency signal as disclosed by Kryder et al.” (Paragraph 2 of the 7/23/06 Office Action).

Again, the Applicant respectfully disagrees with this characterization of Kryder, and in particular with the characterization of a write current component being inherent within the signal emitted by the radio frequency generator. The Kryder reference is explicit in describing how both the magnetic write field and high frequency magnet fields are generated. Specifically, the magnetic write field (i.e., global static magnetic field) is generated by power supply 46 applying a current to a first coil (i.e., loop of wire 48). The high frequency magnetic field (i.e., global static radio frequency field) is generated by radio frequency generator 50 applying a current to a second coil (i.e., loop of wire 52). Therefore, there is no write current component inherent within the signal provided by the radio frequency generator.

Therefore, because the Kryder reference does not disclose producing a current in a coil, wherein the current generates BOTH the magnetic write field and the high frequency magnetic field, Applicant respectfully submits that independent claim 21 is in condition for allowance.

Dependent Claims 23-25 and 27

Dependent claims 23-25 and 27 depend from independent claim 21. As such, these claims are allowable with their independent base claim since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing *In re Fine*, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

Independent claim 30

Independent claim 30 recites a magnetic writer for writing to a magnetic media. The claim language is reproduced below.

30. A magnetic writer comprising:
a write pole; and
a coil adjacent the write pole having a current that includes a write current component and a high frequency component, wherein the write current component and the high frequency component are controlled to create an area of magnetic resonance within a magnetic media.

For the reasons discussed with respect to independent claim 21, Kryder does not disclose a coil adjacent the write pole having a current that includes BOTH write current component and a high frequency component. In contrast, Kryder teaches a first coil (i.e., loop of wire 48) that is supplied with a write current provided by power supply 46 to generate a magnetic write field (i.e., global static magnetic field), and a second coil (i.e., loop of wire 52) that in conjunction with radio frequency generator 50 generates a high frequency magnetic field (i.e., global radio frequency field). Therefore, Kryder does not teach the use of a single coil having a current that includes BOTH the write current component and the high frequency current component, and the Applicant respectfully submits that independent claim 30 is in condition for allowance.

Dependent Claim 32

Dependent claim 32 depends from independent claim 30. As such, this claims is allowable with its independent base claim since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing *In re Fine*, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).

Independent Claim 36

Independent claim 36 recites “a coil adjacent the magnetic pole, the coil having a write current, and writing means for creating an area of magnetic resonance on a portion of the magnetic media, wherein the writing means introduces a high frequency signal to the write current.” Independent claim 36 therefore creates an area of magnetic resonance using a single coil, that coil having a write current that is introduced to a high

frequency signal by the writing means. For the reasons discussed above with respect to independent claims 21 and 30, the rejection of independent claim 36 should be withdrawn.

Claim Rejections - 35 U.S.C. § 103

Claim 26 was rejected under 35 U.S.C. § 103 as being unpatentable over Kryder. Dependent claim 26 depends from independent claim 21. As such, this claim is allowable with its independent base claim since any claim depending from a patentable independent claim is also patentable. See M.P.E.P. 2143.03, citing In re Fine, 5 U.S.P.Q.2d (BNA) 1596 (Fed. Cir. 1988).


CONCLUSION

In view of the foregoing, all pending claims 21-40 are in condition for allowance. A Notice to that effect is respectfully requested.

Respectfully submitted,

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